



# **ORAL HEALTH INFORMATION**

**for the**

## **EARLY CARE AND EDUCATION COMMUNITY**

*Developed through a grant from the  
United Methodist Health Ministry Fund by the  
Kansas Head Start Association  
with the assistance of the  
Kansas Department of Health and Environment  
Kansas Dental Hygienists Association  
Kansas Association for Child Care Resource and Referral Agencies  
September 2001*

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# I. How To Use This Manual

Did you know that. . .

- Dental caries (cavities) are the most common childhood disease?
- Left untreated, dental disease can interfere with language development, eating, sleeping and the ability to learn, as well as predispose children to infection and some systemic diseases?
- Cavities are entirely preventable through education, fluoride and similar treatments, and proper nutrition?

Oral health is a significant issue for many Kansas children, especially those at high risk because of socioeconomic and other factors. Baby bottle tooth decay, the result of putting babies to bed with bottles filled with milk or juice, often results in significant decay in children between one and three years of age. When dental problems do develop, they often remain untreated because of lack of access to dental services.

Like many states, Kansas is experiencing a shortage of dentists—a problem which will become even worse in the coming decade. This issue makes prevention an even more critical strategy for all of us—especially those working with young children.

This manual was designed to provide basic, factual information about oral health in pregnant women and young children, from infants through preschool age. Each section, divided by age group, explains the theory and rationale behind good oral health practice, and then outlines that practice in a series of bullet points, suitable for use in overhead or handout format.

Following each section is a list of web sites and other resources which provide additional information. By building on the basic information with these resources, trainers and educators can customize an oral health unit or training program to the needs of their audience—whether they are college students, child care providers or students.

At the back of the manual are reproducible sheets which can be used as transparencies or handouts to illustrate key points.

## **PRENATAL**

### **RATIONALE:**

- **When pregnant women have unfilled cavities or untreated gum disease, they can transmit the bacteria that cause these problems to their babies through their bloodstream. Gum (or periodontal) disease has been shown to contribute to pre-term, low-birth-weight babies.**
- **Broken teeth and oral lesions can be indicators of serious oral health problems and should be examined by a dentist.**
- **Good nutrition, including supplements where prescribed, has positive effects on the mother's oral and overall health, which in turn lead to healthier development of her baby.**

### **PRACTICE:**

**Pregnant women should be encouraged to:**

- **Practice daily oral hygiene including thorough brushing and flossing**
- **Have a professional dental cleaning and exam as early as possible in the pregnancy,**
- **ideally in the second trimester**
- **Have serious oral health problems treated by a dentist**
- **Avoid sweets, soda pop, and starchy snacks which can cause cavities**
- **Increase calcium intake along with vitamins A and D through dairy products, leafy green vegetables and supplements, when recommended**

## **PRENATAL RESOURCES:**

### **College and University**

- **BRIGHT FUTURES IN PRACTICE: ORAL HEALTH** [www.brightfutures.org](http://www.brightfutures.org)
- **BRIGHT SMILES BRIGHT FUTURES-** Colgate-Palmolive Company, [www.brightsmiles.com](http://www.brightsmiles.com)
- **WOMEN'S ORAL HEALTH ISSUES,** [www.ada.org](http://www.ada.org)
- **NUTRITION AND THE PREGNANT ADOLESCENT,** Center for Leadership, Education and Training in Maternal and Child Nutrition, Jamie Stang 612-626-0351
- **PARTNERS IN PREVENTION: INFANT ORAL HEALTH MANUAL FOR HEALTH PROFESSIONALS,** Jill Fernandez, College of Dentistry – NYU, 345 East 24<sup>th</sup> Street, New York, NY 10010-4086, 212-998-9656

### **Continuing Education**

- **BRIGHT FUTURES IN PRACTICE: ORAL HEALTH** [www.brightfutures.org](http://www.brightfutures.org)
- **News Releases, PREGNANT WOMEN NOT LIKELY TO VISIT DENTIST, ROLE OF SUGAR-FREE FOODS AND MEDICATIONS IN MAINTAINING GOOD ORAL HEALTH,** [www.ada.org](http://www.ada.org)
- **HEALTHY CHILD CARE AMERICA, 888-227-5409, [CHILDCARE@AAP.ORG](mailto:CHILDCARE@AAP.ORG)**
- **LIFT THE LIP VIDEO 206-543-5448 – In English and Spanish (Good for parents to watch before the baby comes)**
- **WOMEN AND PERIODONTAL DISEASE,** American Academy of Periodontology, 800-FLOSS-EM, [www.perio.org](http://www.perio.org)

### **Community**

- **Local WIC Offices**
- **Public Health Departments**
- **PAT (Parents as Teachers)**
- **Primary Care Health Providers**
- **County and State Extension Services**

<b>INFANTS (0 – 6 MONTHS)</b>
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**RATIONALE:**

- **Unfilled cavities in the mother can create cavity-causing germs that can be passed on to baby.**
- **Transmission can occur through sharing food, eating utensils, testing temperature of food, and letting baby stick fingers in mother's mouth.**
- **Fluoride makes babies' teeth stronger and more resistant to cavities. Starting at about 6 months, baby needs fluoride through drinking water or a fluoride supplement prescribed by physician.**
- **Milk and juice left to pool in babies' mouths leads to early childhood caries (cavities).**

**PRACTICE:**

- **Clean babies' gums daily with a clean, damp washcloth, finger cot, or gauze pad.**
- **Hold babies while feeding them and never put babies in bed with a bottle.**
- **Use a variety of healthy comforts, such as infant massage, singing, rocking or security blanket to help babies go to sleep.**
- **Use only a clean pacifier, and never dip it in honey, or anything sweet or alcoholic. Not only can honey cause decay, it can also transmit botulism to infants.**

<b>INFANTS (6 – 12 MONTHS)</b>
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## **RATIONALE:**

- **Between the ages of 6 months and 1 year, the primary teeth begin to appear (erupt). By the age of 3, a child should have 20 teeth. These teeth are important to the development of permanent teeth and need to be kept clean and healthy.**
- **Babies begin to eat solid foods, which sticks to the gums and teeth, and juice, which almost always has sugar added, creating a higher risk of early childhood caries (cavities). When sugary or sticky food combines with cavity-causing bacteria, an acid forms that clings to teeth and causes decay. The acid is strongest for the first 20 minutes after eating, which is why brushing or cleaning your baby's mouth after every meal is so important. When decay occurs, it appears as chalky white spots on the upper front teeth near the gum line.**
- **Left untreated, early childhood caries can cause pain, poor nutrition and developmental delays. They can also result in hospitalization.**
- **Babies' teeth, mouths, and gums can show signs of early oral health problems at this age. White or brown spots or lesions behind the front teeth are an early sign of caries.**

## **PRACTICE:**

- **Babies' mouths should be screened by health professionals, parents child care providers who have been trained to recognize**

**the signs of early childhood caries.** *(Several excellent videos, including Take Time for Teeth and Lift the Lip, are recommended for this training.)*

- **Clean babies' teeth and gums with a soft bristle toothbrush.**
- **Give no more than 2 –4 oz. of juice each day, and do not add sugar. Juice should be drunk at a short concise time and not put n a bottle or sippy cup for prolonged exposure.**
- **Avoid sweetened desserts or sticky foods.**
- **Never give babies soft drinks.**
- **Introduce a drinking cup to wean the baby from the bottle or when breastfeeding is stopped. Sippy cups should not be used as a bottle substitute as they will cause similar dental destruction.**
- **Sooth a teething baby with a teething ring, avoiding those containing liquid. A wet washcloth placed in the freezer for 30 minutes and plastic teething rings placed in the freezer are handy teething aids. Never tie a teething ring around a baby's neck. Instead, use a specially designed clip or a safety diaper pin to attach the teething ring directly to your baby's clothing.**
- **Pain can be relieved by gently rubbing the baby's gums with a clean finger, a finger cot or a wet gauze. Teething gels are not recommended. Use pain medications only with a doctor's recommendation.**

## **INFANT RESOURCES:**

### **College and University**

- **BRIGHT FUTURES IN PRACTICE: ORAL HEALTH**, Health Resources Administration, DHHS, [www.brightfutures.org](http://www.brightfutures.org) for order forms.
- **EARLY CHILDHOOD CARIES, A Team Approach to Prevention and Treatment**, Peter Milgrom, DDS, Philip Weinstein, PhD, University of Washington Continuing Dental Education, Box 357137, Seattle, WA 98195-7137, 206-543-5448 FAX-206-543-6465
- **PARTNERS IN PREVENTION: INFANT ORAL HEALTH MANUAL FOR HEALTH PROFESSIONALS**, Jill Fernandez, College of Dentistry-NYU, 345 East 24<sup>th</sup> Street, New York, NY 10010-4086, 212-998-9656
- **EARLY CHILDHOOD CARIES**, Peter Milgrom, DDS, Philip Weinstein, PhD, University of Washington, Continuing Dental Education, Box 357137, Seattle, WA 98195-7137, 206-543-5448, FAX-206-543-6465.
- **National Maternal and Child Oral Health Resource Center**, [www.mchoralhealth.org](http://www.mchoralhealth.org)
- **National Oral Health Information Clearinghouse, Oral Health Database**, [www.nohic.nider.nih.gov](http://www.nohic.nider.nih.gov)

### **Continuing Education**

- **TAKE TIME FOR TEETH**, Flip chart and video, Texas Department of Health (*copies distributed at this conference*)
- **LIFT THE LIP**, video and flip Chart, University of Washington and the State WIC office, [www.walwica.org](http://www.walwica.org)
- **PREVENTIVE ORAL HEALTH EDUCATION AND INTERVENTION FOR FAMILIES OF EARLY HEAD START**, Dental Specialties, P.O. Box 1135 Gresham, OR 97030, e-mail [jannrdh@yahoo.com](mailto:jannrdh@yahoo.com), [kristenrdh@aol.com](mailto:kristenrdh@aol.com)
- **EARLY CHILDHOOD CARIES PREVENTION**, Healthy SMILE Happy Child, State of Nevada, Maternal and Child Health, 505 East King Street, Room 200, Carson City, NV 89701-4792
- [www.mchoralhealth.org](http://www.mchoralhealth.org) Publications, fact sheets and MCH Program Interchange, April 2001, order on line.
- **CALMING THE ANXIOUS CHILD**, American Academy of Pediatric Dentistry, [www.aadpinfo@aapd.org](mailto:www.aadpinfo@aapd.org)
- **ORAL HEALTH...FROM PREGNANCY THROUGH THE TODDLER YEARS**, An Oral Health Education Program for Health Professionals,

**Colgate Bright Smiles Bright Futures, and The American Public Health Association**

**Community Education**

- **TAKE TIME FOR TEETH**, Flip chart and video, Texas Department of Health (*copies distributed at this conference*)
- **LIFT THE LIP**, video and flip Chart, University of Washington and the State WIC office, [www.walwica.org](http://www.walwica.org)
- **TIPS FOR PARENTS: HELP YOUR CHILDREN SMILE**, 800-847-6718, [www.adha.org](http://www.adha.org) , American Dental Hygienists Association.
- **CARING FOR YOUR CHILD'S TEETH AND GUMS**, American Academy of Periodontology, 800-FLOSS-EM, [www.perio.org](http://www.perio.org) , [www.aboutsmiles.org](http://www.aboutsmiles.org)

<b>TODDLERS 12 – 24 MONTHS</b>
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**RATIONALE:**

- **Children should be involved at the toddler stage to help care for their teeth in order to build good oral hygiene habits.**
- **Fluoride has been proven to minimize tooth decay, especially when present in drinking water, toothpaste and other supplements provided by health professionals.**
- **Fluoride Varnish is a safe and effective way to provide fluoride protection to children's teeth from 12 to 36 months of age. Varnish has been used in Europe for almost 25 years and is endorsed by the ADA and approved as a "device" by the FDA. Studies have shown that fluoride varnish can reduce cavities by 25-40%.**

**PRACTICE:**

- **Encourage children to brush as early as 18 months, with assistance. Use songs, games and favorite toys to make brushing a positive experience.**
- **Use a pea-sized portion of toothpaste on the child's brush.**
- **The tongue needs to be brushed and instructions need to be given to parents and children to assure that all surfaces of teeth are brushed. When brushing is complete, children should rinse with water and spit if possible.**

- **When children are in group settings, toothbrushes should be identified clearly with their names and air dried without touching each other. Brushes should be replaced every 3 months and after an illness.**
- **Injuries often occur in toddlers and young children as they learn to walk and explore their environment. If a baby or toddler injures the gums or teeth and there is bleeding put cold water on a piece of gauze and apply pressure to the site. Call the dentist who will probably want to see the child to make an assessment.**
- **If there is a broken tooth, rinse the mouth with warm water to clean the area. Give the child a cold compress to hold on the injured tooth or on the face to minimize swelling. Collect pieces of the broken tooth if possible. Call the dentist immediately.**
- **Primary teeth (baby teeth) that have been knocked out can often be replaced. Call the child's dentist immediately.**

# **TODDLER RESOURCES**

## **College and University**

- **EARLY CHILDHOOD CARIES RESOURCE GUIDE**, Clark M, Holt K, 1998, [www.mchoralhealth.org/resources.html](http://www.mchoralhealth.org/resources.html)
- **MCH PROGRAM INTERCHANGE: FOCUS ON ORAL HEALTH VOLUME V**, National Center for Education in Maternal and child Health, 2001, [www.mchoralhealth.org/resources.html](http://www.mchoralhealth.org/resources.html)
- **INTO THE MOUTHS OF BABES**, North Carolina Screening and Varnish Project, Kelly Haupt, RDH, MHA, Project Coordinator, e-mail - [khaupt@ncafp.com](mailto:khaupt@ncafp.com)
- **PANDA (Prevent Abuse and Neglect through Dental Awareness)**, [www.deltadental.com](http://www.deltadental.com)
- **ABCD Program (Access to Baby and Child Dentistry)** [www.smileABCD.com](http://www.smileABCD.com)

## **Continuing Education**

- [www.childhealthonline.com](http://www.childhealthonline.com) Dr. Charlotte M. Hendricks, many training options; oral health component now in development.
- **INTO THE MOUTHS OF BABES**, North Carolina Screening and Varnish Project, Kelly Haupt, RDH, MHA, Project Coordinator, [ekhaupt@ncafp.com](mailto:ekhaupt@ncafp.com)
- **ORAL HEALTH..FROM PREGNANCY through the TODDLER YEARS**, Colgate Palmolive and The American Public Health Association.

## **Community Education**

- [www.toothfairy.org](http://www.toothfairy.org) and [www.asis.com/toothfairy](http://www.asis.com/toothfairy), [www.agd.org](http://www.agd.org) Academy of General Dentistry, consumer information.
- [www.dentistinfo.com](http://www.dentistinfo.com) Tooth eruption charts, Proctor and Gamble 800-492-7378
- ‘Caring for children’s Teeth’ [www.crestsmiles.com](http://www.crestsmiles.com)

## **PRESCHOOL 3 – 5 YEARS**

### **RATIONALE:**

- **Preschoolers still need supervision and assistance with daily brushing to reinforce good oral hygiene habits and to accomplish good oral hygiene. Regular dental screenings are important to identify problems before they become more serious.**
- **Good nutritional habits are particularly critical, as this age group demonstrates ore independence and mobility. Snacking should be limited to healthy foods, avoiding sugary, sticky foods that can promote tooth decay.**
- **When preschoolers continue to suck on pacifiers, thumbs or fingers, frequently and with intensity, the primary and permanent teeth as well as the jaws may be affected. Prolonged sucking may cause significant or prolonged malocclusion (open bite) in which a child's upper and lower teeth cannot be brought together when the jaws are closed.**
- **The best way for health professionals and families to protect children from dental injuries in education and early intervention.**

### **PRACTICE:**

- **Practice brushing with preschoolers twice a day, making sure the surfaces of all teeth to the gum line are brushed. The use of puppets especially designed to teach toothbrushing can be helpful.**

- **Provide healthy foods and minimize snacking, particularly sugary, sticky foods eaten between meals. Avoid soda pop.**
- **Weaning from any or all sucking habits should begin by age two and a half so that it is stopped completely before any significant noticeable changes take place.**
- **The use of seat belts and bike helmets can prevent a significant number of injuries to the head, face, mouth, teeth, oral tissues and jaws.**
- **Children of all ages must be considered at risk for child abuse. Dental professionals should look for signs of child abuse. In 65 percent of physical abuse cases, reported injuries occur to the head, neck and mouth.**

## **PRESCHOOL RESOURCES:**

### **College and University**

- **BRIGHT FUTURES IN PRACTICE: ORAL HEALTH** [www.brightfutures.org](http://www.brightfutures.org)
- **RECOMMENDATIONS FOR USING FLUORIDE TO PREVENT AND CONTROL DENTAL CARIES IN THE UNITED STATES, CDC 8/17/01**  
Available on the Web [www.cdc.gov/mmwr](http://www.cdc.gov/mmwr) or hard copies can be ordered by contacting: Superintendent of documents, US Government Printing Office, Washington, DC 20402, or phone 202-512-1800.

### **Continuing Education**

- **DENTAL HEALTH FOR PRESCHOOL CHILDREN**, Missouri Department of Health, P.O. Box 570, Jefferson City, MO 65102-0570, 573-751-6247.
- **National Institute of Dental and Craniofacial Research, 45 Center Drive MSC 6401, Building 45/room 4AS-19, Bethesda, MD 20892-6401, [www.nidcr.nih.gov](http://www.nidcr.nih.gov)** Call Mary at 301-594-7559 for free materials, including: SNACK SMART FOR HEALTH TEEETH, PLAQUE FOR SOUND TEETH, SEAL OUT DENTAL DECAY.
- **DR. RABBIT'S WORLD TOUR, FEATURING DR. RABBIT, THE ANIMATED DENTIST, AND HIS TEAM OF YOUNG TRAVELERS FROM AROUND THE WORLD.** Colgate-Palmolive company, 1998, Video, 13 minutes. Volunteer Partnership, Colgate Bright Smiles, Bright Futures, 800-334-7734, no charge
- **HEALTHY SMILES FOR CHILDREN WITH SPECIAL NEEDS**, American Academy of Pediatric Dentistry, 1998, Video, 12:02 minutes, AAPD Chicago, Phone, 312-337-2169, Web site: [www.aapd.org](http://www.aapd.org), \$9.95.
- **NOHIC: AN INFORMATION SERVICE FOR SPECIAL CARE IN ORAL HEALTH**, National Oral Health Clearing House, Phone, 301-402-7364 and ordering information, 877-216-1019, Web site: [www.nidcr.nih.gov](http://www.nidcr.nih.gov)

### **Community Education:**

- **YOUR CHILD'S TEETH**, American Dental Association 13pp. Catalog sales, ADA, phone, 800-947-4746, Web site, [www.ada.org](http://www.ada.org) , no charge.
- **FAMILY GUIDE TO ORAL HEALTH** Web site: [www.colgatebsbf.com/parents/Family-Guide/familyguide.html](http://www.colgatebsbf.com/parents/Family-Guide/familyguide.html) and click on professionals and teachers for more information.

